

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1.-21. (canceled)

22. (currently amended) A computer-readable medium with executable instructions for performing the steps of:

receiving a signal from a sensor, the signal comprising positional variables selected from the group consisting of the relative angular position of a towing vehicle and a towed item, a position of a rearview mirror, a distance from the rearview mirror and an attachment point, and a distance from the attachment point to an axle of a trailer; [and]

correlating the positional variables using at least one of routines and lookup tables;

generating a control signal based on the correlating step, the generated control signal including positioning data to position the rearview mirror; and

supplying the control signal to a rearview mirror positioning device, the rearview mirror being positioned based on the supplied control signal.

23. (original) The computer-readable medium of claim 22, further comprising performing the step of displaying the relative angular position in degrees or radians.

24. (new) The computer-readable medium of claim 22 wherein the receiving step includes detecting directional and rotational information by a detector.

25. (new) The computer-readable medium of claim 24 wherein the receiving step includes receiving the signal as quadrature encoded signal.

26. (new) The computer-readable medium of claim 25 wherein the quadrature encoded signals are used to calculate rotational direction and angular displacement.

27. (new) The computer-readable medium of claim 22 further including switching between a manual and an automatic control of the rearview mirrors.

28. (new) The computer-readable medium of claim 22 further including adjusting operation of the method to account for trailers of different lengths.

29. (new) The computer-readable medium of claim 28 wherein the adjusting step includes,

relating the trailer length to slopes which represent the linear relationship between the encoder rotation and the mirror rotation.

30. (new) The computer-readable medium of claim 22 further including, setting an alarm which is triggered as the pivoting mechanism reaches a maximum allowed angle.

31. (new) The method of claim 22 further including rotating at least one of the rearview mirrors a pre-selected angle, when energization of one of a left or right turn signal is sensed.

32. (new) A method of positioning rearview mirrors for a tractor-trailer combination, wherein the tractor and trailer are connected via a pivoting mechanism which permits pivoting between the tractor and the trailer, the method comprising:

detecting a relative position of the tractor and the trailer, while they are connected, based on a feedback signal of an encoder affixed at a position on the tractor of the tractor-trailer combination which permits the encoder to detect angular change between the tractor and the trailer;

correlating, by a microprocessor, the angular change between the tractor and the trailer;

generating, by the microprocessor, a rearview mirror positioning signal;

supplying, by the microprocessor, the rearview mirror positioning signal to a rearview mirror control mechanism; and

operating the rearview control mechanism to position the rearview mirrors, in accordance with the rearview mirror positioning signal.

33. (new) The method of claim 32 wherein the correlating uses information related to at least one of a length and width of the trailer, a weight of the trailer, a trailer's axle width, a position of the encoder, a position of a fifth wheel plate on the tractor, or a position of the trailer's axes.
34. (new) The method according to claim 32, wherein the detecting step includes detecting directional and rotational information.
35. (new) The method of claim 32, wherein the detecting step includes generating encoded signals by the encoder, the encoded signals being quadrature encoded signals.
36. (new) The method of claim 35, wherein the quadrature encoded signals are used to calculate rotational direction and angular displacement.
37. (new) The method of claim 32 further including switching between a manual and an automatic control of the rearview mirrors.
38. (new) The method of claim 32 further including adjusting operation of the method to account for trailers of different lengths.
39. (new) The method of claim 38 wherein the adjusting step includes,
relating the trailer length to slopes which represent the linear relationship between the encoder rotation and the mirror rotation.
40. (new) The method of claim 32 further including,
setting an alarm which is triggered as the pivoting mechanism reaches a maximum allowed angle.
41. (new) The method of claim 32 further including performing a calibration step prior to the detecting step, wherein the calibrating includes,
zeroing out all existing positional data;
detecting angular movement of the tractor, the angular movement corresponding to an operator indirectly viewing an end of the trailer via the rearview

mirror; and

generating calibration data, wherein the calibration data is stored and reusable.